

Claims

1. A floating structure comprising at least one closed space (10), a hull in the shape of a concrete cofferdam (12) having an external delimiting surface to be exposed to surrounding water, and a function for heating the space comprising a heat pump connected to a closed circuit for a circulating heat transport medium, *characterised in* that at least one collector hose (14) for the circulating heat transport medium is provided in recesses in the concrete such that a cross section of the collector hose is in its entirety located within an external outline of the cofferdam, heat from the surrounding water being absorbed by the collector hose (14) and extracted for heating of the space (10).

10 2. The floating structure according to claim 1, wherein the collector hose (14) is provided in elongate depressions (16) in the external delimiting surface of the concrete cofferdam such that the cross section of the collector hose at least partially is exposed to the surrounding water.

15 3. The floating structure according to claim 1 or 2, wherein the collector hose (14) is provided in elongate depressions (16) in the external surface of the concrete cofferdam such that the cross section of the collector hose is entirely exposed to the surrounding water.

20 4. The floating structure according to claim 1, wherein the collector hose (14) is arranged in closed recesses where the entire cross section of the hose is surrounded by concrete, whereby heat of the surrounding water is transferred to the collector hose (14) by heat conduction in the concrete.

5. The floating structure according to any of the previous claims, *characterised in* that the external delimiting surface of the concrete cofferdam comprises trapezoidal depressions (16) and ridges (18).

25 6. The floating structure according to claim 1 or 4 *characterised in* that the external delimiting surface of the concrete cofferdam is planar.

7. The floating structure according to any of the previous claims, *characterised in* that the collector hose (14) is provided in a bottom section of the concrete cofferdam.

30 8. The floating structure according to any of the previous claims, *characterised in* that the collector hose (14) is provided in the walls of the concrete cofferdam.

35 9. The floating structure according to any of the previous claims, *characterised in* that a bypass (22) is provided in the closed circuit, the bypass being capable of dividing a certain amount of the circulating heat transport medium to a separate circulation loop (20) located upstream of the heat pump (24), that said separate

circulation loop (20) passes the circulating heat transport medium through a convecting device (26) whereby the circulating medium also is used for cooling of the space (10).

10. The floating structure according to any of the previous claims, characterised in that the closed space (10) is a home.

5 11. A method for moulding a concrete cofferdam (12) adapted to be a hull of a floating structure, characterised by moulding the concrete cofferdam onto an at least partially profiled mould such that the concrete cofferdam obtains an exterior delimiting surface having a structure.

10 12. The method according to claim 11, characterised by moulding the concrete cofferdam (12) onto a corrugated metal sheet having trapezoidal depressions and ridges.

13. The method according to claim 11, characterised by moulding the concrete cofferdam (12) onto a sinusoidal metal sheet.
